

MABACT0022



1:1 RF Flux Coupled Transformer
5-50 MHz

M/A-COM Products
Released - Rev. V1

Features

- Surface Mount
- 1:1 Impedance
- Available on Tape and Reel.

Description

M/A-COM's MABACT0022 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. The windings of the MABACT0022 are welded to the package substrate for improved reliability and reduced lead content. This Transformer is ideally suited for CATV and Satellite STB/Subscriber applications.



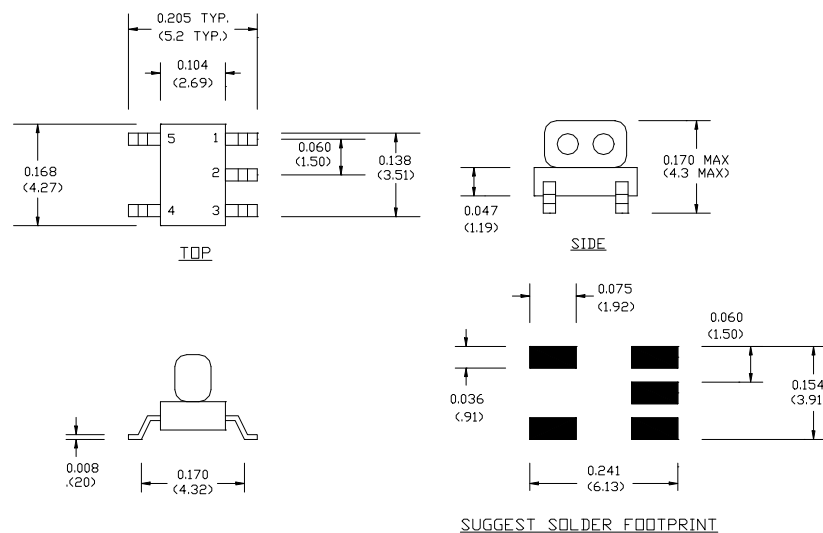
Pin Configuration

Pin No.	Function
1	Secondary (Output Port 1)
2	Center Tap (Ground)
3	Secondary Dot (Output Port 2)
4	Primary Dot (Input)
5	Primary (Ground)

Ordering Information

Part Number	Package
MABACT0022	2000

Case Style: SM-138



Note: Reference Application Note **M513** for reel size information.

Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

1 **ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400
• India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588
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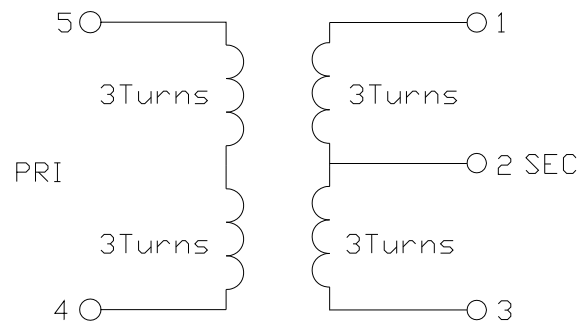
Electrical Specifications @ 25°C, Z₀ = 75 Ohms

Frequency Range 5 - 50 MHz	Test Conditions	Nominal	Units	Min.	Typ.	Max.
Insertion Loss (Above 3dB)	5 - 50 MHz	—	dB	—	0.3	0.5
Amplitude Unbalance	5 - 50 MHz	—	dB	—	0.04	0.10
Phase Unbalance	5 - 50 MHz	—	°	—	0.3°	2.0°
Input Return Loss	5 - 50 MHz	—	dB	20	25	—

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Storage Temperature	-40° C to +85°C
Operating Temperature	-40° C to +80°C

Schematic



1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

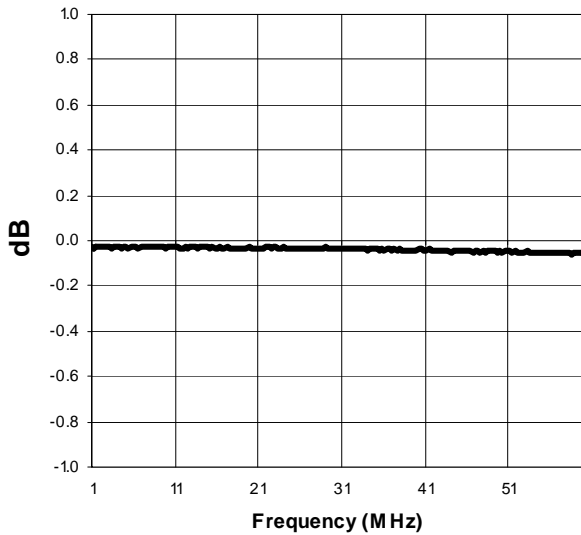
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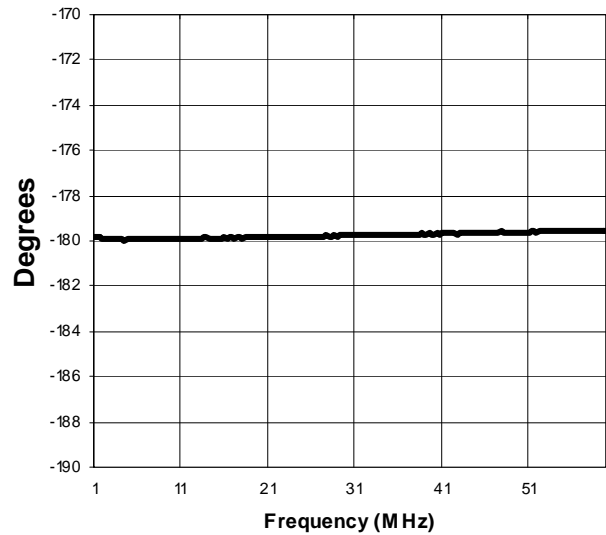
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Typical Performance @ +25° C

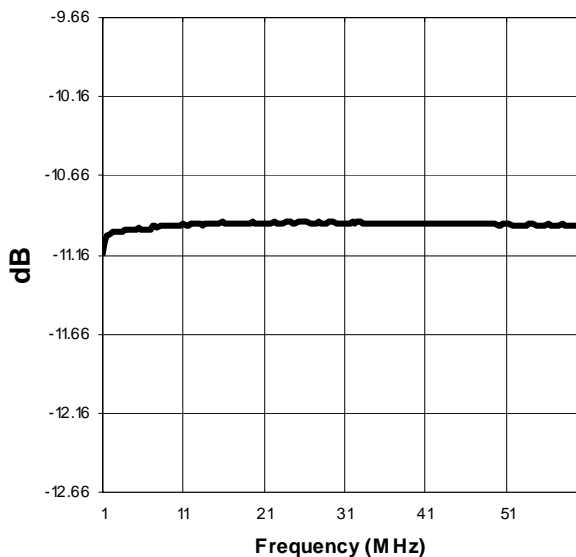
Amplitude Unbalance



Phase Unbalance



Insertion Loss (reference value -10.66dB)



Input Return Loss

